

## Environmental Protection Agency

## Pt. 63, Subpt. JJJJJ, Table 4

If your boiler is in this subcategory. . .	You must meet the following. . .
1. Existing or new coal, new biomass, and new oil (units with heat input capacity of 10 million Btu per hour or greater).	Minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
2. Existing or new coal (units with heat input capacity of less than 10 million Btu per hour).	Conduct a tune-up of the boiler biennially as specified in §63.11223.
3. Existing or new biomass or oil .....	Conduct a tune-up of the boiler biennially as specified in §63.11223.
4. Existing coal, biomass, or oil (units with heat input capacity of 10 million Btu per hour and greater).	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. The energy assessment must include: <ul style="list-style-type: none"> <li>(1) A visual inspection of the boiler system,</li> <li>(2) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints,</li> <li>(3) Inventory of major systems consuming energy from affected boiler(s),</li> <li>(4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,</li> <li>(5) A list of major energy conservation measures,</li> <li>(6) A list of the energy savings potential of the energy conservation measures identified,</li> <li>(7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.</li> </ul>

TABLE 3 TO SUBPART JJJJJ OF PART 63—OPERATING LIMITS FOR BOILERS WITH EMISSION LIMITS

As stated in §63.11201, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable emission limits using . . .	You must meet these operating limits. . .
1. Fabric filter control .....	a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); OR b. Install and operate a bag leak detection system according to §63.11224 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.
2. Electrostatic precipitator control .....	a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); OR b. Maintain the secondary power input of the electrostatic precipitator at or above the lowest 1-hour average secondary electric power measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.
3. Wet PM scrubber control .....	Maintain the pressure drop at or above the lowest 1-hour average pressure drop across the wet scrubber and the liquid flow-rate at or above the lowest 1-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with the PM emission limitation.
4. Dry sorbent or carbon injection control ..	Maintain the sorbent or carbon injection rate at or above the lowest 2-hour average sorbent flow rate measured during the most recent performance test demonstrating compliance with the mercury emissions limitation. When your boiler operates at lower loads, multiply your sorbent or carbon injection rate by the load fraction (e.g., actual heat input divided by the heat input during performance stack test, for 50 percent load, multiply the injection rate operating limit by 0.5).
5. Any other add-on air pollution control type.	This option is for boilers that operate dry control systems. Boilers must maintain opacity to less than or equal to 10 percent opacity (daily block average).
6. Fuel analysis .....	Maintain the fuel type or fuel mixture (annual average) such that the mercury emission rates calculated according to §63.11211(b) is less than the applicable emission limits for mercury.
7. Performance stack testing .....	For boilers that demonstrate compliance with a performance stack test, maintain the operating load of each unit such that it does not exceed 110 percent of the average operating load recorded during the most recent performance stack test.
8. Continuous Oxygen Monitor .....	Maintain the oxygen level at or above the lowest 1-hour average oxygen level measured during the most recent CO performance stack test.

TABLE 4 TO SUBPART JJJJJ OF PART 63—PERFORMANCE (STACK) TESTING REQUIREMENTS

As stated in §63.11212, you must comply with the following requirements for performance (stack) test for affected sources:

Pt. 63, Subpt. JJJJJJ, Table 5

40 CFR Ch. I (7–1–11 Edition)

To conduct a performance test for the following pollutant. . .	You must. . .	Using. . .
1. Particulate Matter .....	a. Select sampling ports location and the number of traverse points. b. Determine velocity and volumetric flow-rate of the stack gas. c. Determine oxygen and carbon dioxide concentrations of the stack gas.  d. Measure the moisture content of the stack gas. e. Measure the particulate matter emission concentration.	Method 1 in appendix A–1 to part 60 of this chapter. Method 2, 2F, or 2G in appendix A–2 to part 60 of this chapter. Method 3A or 3B in appendix A–2 to part 60 of this chapter, or ASTM D6522–00 (Reapproved 2005), <sup>a</sup> or ANSI/ASME PTC 19.10–1981. <sup>a</sup>  Method 4 in appendix A–3 to part 60 of this chapter. Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A–3 and A–6 to part 60 of this chapter and a minimum 1 dscm of sample volume per run.
2. Mercury .....	a. Select sampling ports location and the number of traverse points. b. Determine velocity and volumetric flow-rate of the stack gas. c. Determine oxygen and carbon dioxide concentrations of the stack gas.  d. Measure the moisture content of the stack gas. e. Measure the mercury emission concentration.	Method 19 F-factor methodology in appendix A–7 to part 60 of this chapter. Method 1 in appendix A–1 to part 60 of this chapter. Method 2, 2F, or 2G in appendix A–2 to part 60 of this chapter. Method 3A or 3B in appendix A–2 to part 60 of this chapter, or ASTM D6522–00 (Reapproved 2005), <sup>a</sup> or ANSI/ASME PTC 19.10–1981. <sup>a</sup>  Method 4 in appendix A–3 to part 60 of this chapter. Method 29, 30A, or 30B in appendix A–8 to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784–02. <sup>a</sup> Collect a minimum 2 dscm of sample volume with Method 29 of 101A per run. Use a minimum run time of 2 hours with Method 30A.
3. Carbon Monoxide .....	a. Select the sampling ports location and the number of traverse points. b. Determine oxygen and carbon dioxide concentrations of the stack gas.  c. Measure the moisture content of the stack gas. d. Measure the carbon monoxide emission concentration.	Method 19 F-factor methodology in appendix A–7 to part 60 of this chapter. Method 1 in appendix A–1 to part 60 of this chapter. Method 3A or 3B in appendix A–2 to part 60 of this chapter, or ASTM D6522–00 (Reapproved 2005), <sup>a</sup> or ANSI/ASME PTC 19.10–1981. <sup>a</sup>  Method 4 in appendix A–3 to part 60 of this chapter. Method 10, 10A, or 10B in appendix A–4 to part 60 of this chapter or ASTM D6522–00 (Reapproved 2005) <sup>a</sup> and a minimum 1 hour sampling time per run.

<sup>a</sup>Incorporated by reference, see § 63.14.

TABLE 5 TO SUBPART JJJJJJ OF PART 63—FUEL ANALYSIS REQUIREMENTS

As stated in § 63.11213, you must comply with the following requirements for fuel analysis testing for affected sources:

To conduct a fuel analysis for the following pollutant. . .	You must. . .	Using. . .
1. Mercury .....	a. Collect fuel samples .....	Procedure in § 63.11213(b) or ASTM D2234/D2234M <sup>a</sup> (for coal) or ASTM D6323 <sup>a</sup> (for biomass) or equivalent.
	b. Compose fuel samples .....	Procedure in § 63.11213(b) or equivalent.
	c. Prepare composited fuel samples .....	EPA SW–846–3050B <sup>a</sup> (for solid samples) or EPA SW–846–3020A <sup>a</sup> (for liquid samples) or ASTM D2013/D2013M <sup>a</sup> (for coal) or ASTM D5198 <sup>a</sup> (for biomass) or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865 <sup>a</sup> (for coal) or ASTM E711 <sup>a</sup> (for biomass) or equivalent.